

## HIGH-SPEED CHEMICAL DRILL

### Abstract

5 A high-speed chemical drill (20) for removing portions of a target material (30), comprises: an elongated tube (21) formed of a fuel material; a source (24) of oxidizer; a conduit (26) for establishing a controllable flow of oxidizer from said source through said tube; and a sleeve (28) formed of a material containing chlorine and/or fluorine mounted on said tube; whereby, when said drill is ignited and used to remove portions of a target material, the chlorine and/or fluorine in said sleeve material will react chemically with the target material to form gaseous reaction products.